FID 252260800



September 18, 2014

## RECEIVED

Mr. Lee Delcore Wisconsin Department of Natural Resources 1155 Pilgrim Road Plymouth, WI 53073 SEP 22 2014

# PLYMOUTH DNR

RE: Site Investigation Work Plan for the Former Fox Auto Salvage (a/k/a Historical Standard Oil) Property Located at 2423 Racine Street in the Village of Mount Pleasant, Wisconsin; ReadyEarth Project No. 13-0603; BRRTS No. 03-52-554541; PECFA No. 53403-3348-23

Dear Mr. Delcore,

**ReadyEarth Consulting, Inc. ("ReadyEarth")** is pleased to submit this site investigation (SI) work plan for the above-referenced site (the "site"). ReadyEarth prepared this work plan in accordance with chs. NR 716.07 and 716.09, Wisconsin Administrative Code. In order to prepare this work plan, ReadyEarth has conducted research regarding the site history, discussed the site with you, and has conducted a number of site visits. ReadyEarth has completed the appropriate notifications to the Wisconsin Department of Natural Resources (DNR) to establish eligibility for the site through the Petroleum Environmental Cleanup Act (PECFA) program. ReadyEarth also anticipates that the DNR will approve ReadyEarth as an agent for the site.

### Project Background – Site Investigation Scoping

The attached Figures 1 and 2 illustrate the location and general features of the site, respectively. ReadyEarth understands that the site formerly operated as a gasoline filling station that utilized a 1,000-gallon leaded gasoline underground storage tank (UST) and a 500-gallon waste oil UST. ReadyEarth understands that the USTs were removed from the site as of April 1986. ReadyEarth also understands that while performing work to improve the Highway 32 right-of-way, the Wisconsin Department of Transportation (DOT) encountered impacts adjacent to the site. The DOT assumed that the impacts detected within the right-of-way originated from the site and reported a release to the DNR. No actual samples have been collected from the site.

ReadyEarth has conducted two site visits and attempted to conduct research at the City of Racine and the Village of Mount Pleasant. The site contains one building that is currently an auto service garage. The former dispenser island, which is no longer

ReadyEarth Consulting, Inc.

P.O. Box 365 Pewaukee, WI 53072

jbartley@ReadyEarth.net PHONE 262.522.3520 MOBILE 414.731.9874 FAX 262.522.3501

www.readyearth.net

apparent and covered by concrete, is understood to have been between the building and the adjacent right-of-way to the west. ReadyEarth also understands that the former gasoline UST had been located directly beneath the dispenser island. Neither the City of Racine nor the Village of Mt. Pleasant contained any records pertinent to this work plan.

The National Resources Conservation Service (NRCS) web soil survey indicates that the soils in the area of the site are comprised of loamy land. ReadyEarth anticipates the soils in the area of the site to consist of fine-grained soils such as silty clay. Based on regional bedrock maps, ReadyEarth anticipates that bedrock within the area of the site is at least 50 feet below ground surface (bgs). ReadyEarth anticipates that groundwater is present beneath the site at depths between approximately 10 to 20 feet bgs. Regional shallow groundwater likely flows to the east/southeast based on local topography.

#### Site Description

The site is located in the SW ¼ of the SW ¼ of Section 21, Township 3N, Range 23E. The site currently operates as an auto service garage. The elevation of the site is approximately 625± feet above mean sea level. The topography in the vicinity of the site is relatively flat but slopes down gently to the southeast toward Lake Michigan, which is located approximately 1,500 feet to the east. The ground surface of the site is also relatively flat, and is generally covered with concrete pavement along the frontage of the building facing Racine Street (Hwy 32) and gravel around the rear of the building. The public right-of-ways of Racine Street (Hwy 32) and 25<sup>th</sup> Street adjoin the site to the west and south, respectively. The adjoining property to the east is a vacant grassy parcel, and the adjacent lot to the north is a vacant, unpaved parcel. The site is located in a predominantly industrial/commercial area of the Village of Mt. Pleasant just south of the City of Racine.

#### Site Investigation Scope of Work

ReadyEarth proposes to advance approximately eight probeholes at the site to evaluate the soil conditions and determine the lateral and vertical extents of soil impacts. Based on the conditions observed within the probeholes, ReadyEarth may install temporary wells in select probeholes in order to determine locations of NR 141 monitoring wells. The attached Figure 2 illustrates the approximate locations of the proposed probeholes/ wells.

2

#### Sample Collection

ReadyEarth will collect soil samples from the probeholes at continuous, approximate 2foot intervals. ReadyEarth will field screen the soil samples with a photoionization detector (PID) and will visually classify the soil samples in general accordance with the Unified Soil Classification System (USCS).

ReadyEarth will submit one to three soil samples from each probehole for laboratory analyses of petroleum volatile organic compounds (PVOCs) and naphthalene. ReadyEarth will also submit select soil samples for analyses of total lead. ReadyEarth will select the laboratory samples based on PID readings, based on correlation to the apparent depth to water, or based on ReadyEarth's discretion to evaluate a specific goal of the SI such as evaluating the vertical extent of impacts or evaluating potential direct contact issues. ReadyEarth will determine site-specific residual contaminant levels (RCLs) as part of our direct contact evaluation.

ReadyEarth will return to the site to sample any temporary wells installed during the initial phase of the SI. Prior to sampling, ReadyEarth will measure the depth to groundwater and survey the well network to determine a preliminary direction of groundwater flow. ReadyEarth will submit those groundwater samples for analyses of PVOCs and naphthalene.

ReadyEarth will evaluate the results from the initial phase of soil and groundwater sampling to determine locations for NR 141 wells, if necessary. To install wells, ReadyEarth will direct a drilling contractor to drill borings with a truck-mounted drill rig equipped with 4 ¼-inch, inside diameter, hollow stem augers. The drilling contractor will construct the wells with schedule 40 PVC with 10-foot screens and appropriate well construction materials and techniques per NR 141. Each of the wells will be installed with flush-mount well covers set in concrete. ReadyEarth will return to the site after several weeks to develop the monitoring wells, survey the well network, and collect depth to groundwater measurements. ReadyEarth will collect an initial round of groundwater samples from each well for laboratory analyses of VOCs and dissolved lead. ReadyEarth will submit groundwater samples from subsequent rounds for laboratory analyses of PVOCs and naphthalene. ReadyEarth may also submit select groundwater samples from subsequent rounds for analyses of dissolved lead. ReadyEarth will calculate groundwater elevations and determine groundwater flow

3

direction. ReadyEarth will also conduct transmissivity tests in two wells to estimate the hydraulic conductivity of the saturated soils beneath the site.

ReadyEarth will utilize standard field decontamination procedures, disposable equipment, or dedicated equipment to avoid cross-contamination. The decontamination procedures will include a tri-sodium phosphate wash and potable water rinse.

#### Laboratory Analyses

ReadyEarth will submit each of the selected soil samples to a Wisconsin-certified laboratory for analyses of PVOCs and naphthalene. ReadyEarth will submit up to five of the selected soil samples for analyses of total lead. ReadyEarth will submit the initial round of groundwater samples to a Wisconsin-certified laboratory for analyses of VOCs and dissolved lead. ReadyEarth will submit groundwater samples from subsequent sampling rounds for analyses of PVOCs and naphthalene, and may submit select samples for analyses of dissolved lead. ReadyEarth will utilize laboratory-provided sample containers and standard preservation methods where applicable to the specified analytical methods. ReadyEarth will submit the samples to the laboratory under standard chain-of-custody procedures, and field/trip blanks will accompany the samples as appropriate.

#### Documentation

ReadyEarth will compile the results of the field and laboratory analyses and prepare a written SI report to the DNR. The report will include tables, isoconcentration figures, and cross section figures to document the work conducted at the site. The report will also include boring logs, well construction and development forms, and ReadyEarth's analyses of the data collected from the site. The report will also include ReadyEarth's recommendations for subsequent actions at the site.

#### Estimated Timeframe

ReadyEarth presents the following schedule for the various services:

- **By 9/30/14** Prepare work plan, obtain bids, clear utilities, and coordinate the fieldwork.
- **By 10/31/14** Complete the probeholes and well installation, submit soil samples to the laboratory and coordinate groundwater sampling.

- **By 11/28/14** Complete well installation, well survey and well development, conduct one round of groundwater sampling, and submit groundwater samples to laboratory.
- **By 1/30/15** Compile field and laboratory data, evaluate and coordinate additional warranted activities. Provide a brief status update to DNR.
- Feb/Mar 2015 Conduct a second round of groundwater sampling, if necessary.
- By 4/30/15 Compile all data and prepare the SI report.

We appreciate the opportunity to submit this work plan and your assistance with this project. If you have any questions or comments regarding this submittal, please call me at (262) 522-3520.

Sincerely,

ReadyEarth Consulting, Inc.

Jason E. Bartley, P.G. President

attachments

cc: Mr. Chuck Ricksecker



